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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,438	01/28/2002	Manabu Kanno	02033/HG	4300

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EXAMINER

ANDREWS, MELVYN J

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 12/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/058,438	KANNO ET AL.	
	Examiner	Art Unit	
	Melvyn J. Andrews	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>10703</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

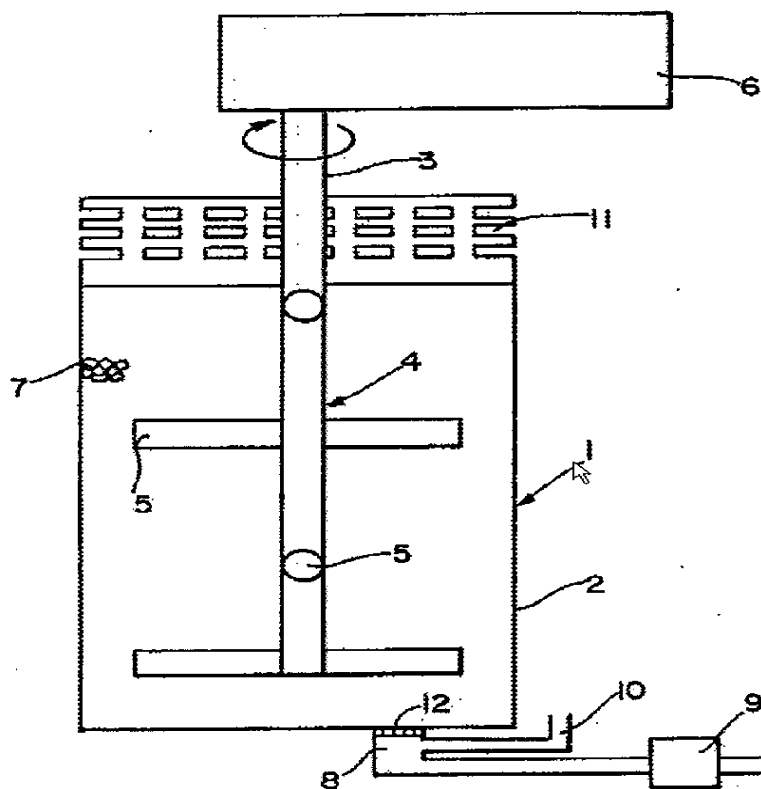
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

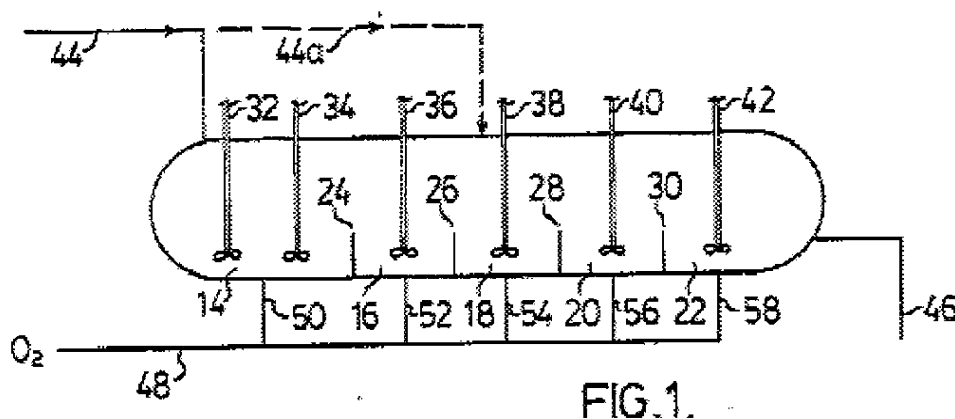
Claims 1 to 6, 11 to 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al (US 5,007,589) in view of Weir (US 4,606,763). Evans et

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al discloses a process for simultaneously leaching and fine milling a subdivided source material such as gold bearing pyrite, pyrrhotite or marcasite concentrates where milling releases iron and sulfur into solution (col.2, lines 54 to 60) as illustrated in FIG. 1 using a stirred mill 1 (col.3, lines 36 to 58).

**FIG. 1**

Evans does not disclose milling a zinc concentrate in an aqueous solution containing free sulfuric acid and ferric ions but Weir discloses pressure oxidation acid leaching of zinc and iron-containing material and discloses that refractory gold ore or concentrates typically contain pyrite (col.3, lines 20 to 57) may be treated in an elongated autoclave (col.2, line 51 to col.3, line 19) as shown in FIG. 1.



It would have been obvious to one of ordinary skill in the art at the time the invention was made to simultaneously grind and leach a zinc or gold containing concentrate as disclosed by Evans et al in sulfuric acid as disclosed by Weir the motivation being to achieve enhanced results in the recovery of gold (Evans et al col.1, lines 29 to 55).

With respect to Claims 4 to 6 Weir discloses oxygen supply line 48 (col.2, lines 65 to 68) shown in FIG. 1 and Evans et al discloses gas inlet 10 which may provided with oxygen or air (col.3, lines 49 to 52) shown in FIG.1.

With respect to Claims 4 to 6 Weir discloses "recycled process solution may be fed through feed line 44" (col.3, lines 61 to 68).

Claims 7, 8, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al (US 5,007,589) in view of Weir (US 4,606,763) as applied to claim 1 above, and further in view of Andre (US 4,676,828). Andre discloses a process for leaching under pressure and controlling the quantities of free sulphuric acid (col.17, line 25 to col.18, line 32) which would be obvious to apply when using sulfuric acid as disclosed by Weir (col.3, line 45) .

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al (US 5,007,589) in view of Weir (US 4,606,763) as applied to claim 1 above, and further in view of Fugleberg et al (US 5,120,353) . Fugleberg et al discloses a method of recovering valuable metals including lead gold and silver from zinc concentrate comprising floating (col.6, lines 15 to 17) which are the same metals being recoverable by Weir et al .

Election/Restrictions

Claim 21 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper filed Oct. 3, 2003.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on October 7 2003 The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

The information disclosure statement filed October 7, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. In this case the EPO 451,456 Fugelberg et al was not submitted but applicants submitted US Patent No. 5,120,353 Fugleberg et al this was considered.

A copy of a Communication and Search Report issued in the counterpart European application apparently was not filed as stated in IDS of OCT 07, 2003 and could not be considered.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kawabata (US 4,269,808), Sinclair et al (US 5,346,532), Corrans et al (US 5,232,491) and Saruta et al (US 6,475,450) disclose pulverization of ores, comminuted ores, milling of ores and improved leaching of ores.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvyn J. Andrews whose telephone number is 703-308-3739. The examiner can normally be reached on 8:00A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 703-308-1146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Melvyn Andrews
MELVYN ANDREWS
PRIMARY EXAMINER

mja
December 10, 2003